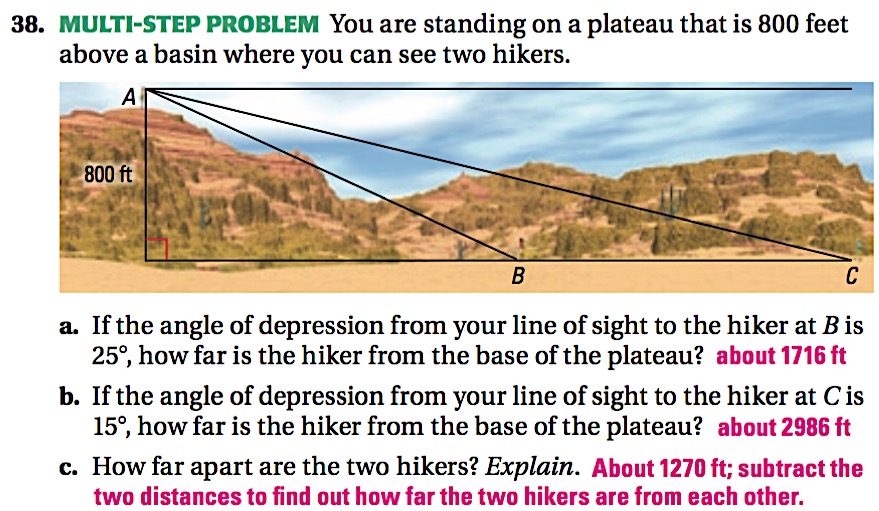
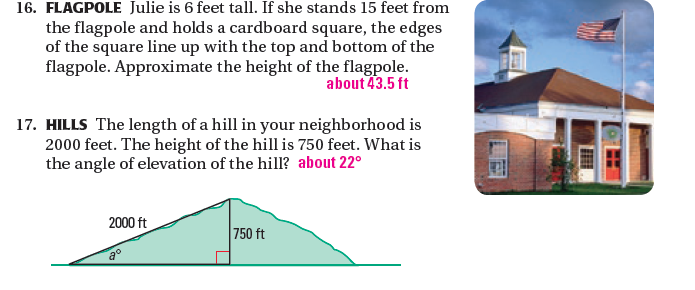
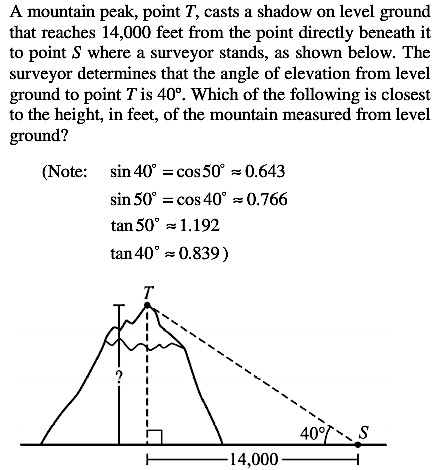
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CW/HW 70: Solving Right Triangles

**Honors Geometry**

1. In order to unload clay easily, the body of a dump truck must be elevated to at least 55°. If the body of the drump truck is 14 feet long and has been raised 10 feet, will the clay pour out easily? *Explain* your reasoning.
2. The perimeter of rectangle *ABCD* is 16 centimeters, and the ratio of its width to its length is 1:3. Segment *BD* divides the rectangle into two congruent riangles. Find the side lengths and measure of one of these triangles. (*hint: What can you do to make this problem more accessible?*)
3. ****You are standing on a plateau that is 800 ft. above a basin where you see two hikers.
   1. If the angle of depression from your line of sight to the hiker at *B* is 25°, how far is the hiker from the base of the plateau?
4. If the angle of depression from your line of sight to the hiker at *C* is 15°, how far is the hiker from the base of the plateau?
5. How far apart are the two hikers? Explain.
6. FLAGPOLE Julie is 6 feet tall. If she stands 15 feet from the flagple and holds a cardboard square, the edges of the square line up with the top and bottom of the falgpole. Approximate the height of the flagpole.
7. HILLS The length of a hill in your neighborhood is 2000 feet. The height of the hill is 750 feet. WHat is the angle of elevation of the hill?
8. You are standing 25 yards from a 12’ high wall. You wish to shoot an arrow over the wall. What angle of elevation shoud you aim the arrow?
9. ****

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| PYTHAGOREAN THEOREM Solve for x. Leave your answer in simplified radical form. | | |
| 1. **C:\Users\kramos\Desktop\Review1.PNG** | **C:\Users\kramos\Desktop\Review2.PNG** | 3. **C:\Users\kramos\Desktop\Review3.PNG** |
| SPECIAL RIGHT TRIANGLES Find the value of x and y for each triangle. | | |
| 4. **C:\Users\kramos\Desktop\Review4.PNG** | 5. **C:\Users\kramos\Desktop\Review5.PNG** | 6. **C:\Users\kramos\Desktop\Review6.PNG** |
| TRIG AND INVERSE TRIG Solve each right triangle. | | |
| 7. **C:\Users\kramos\Desktop\Review7.PNG** | 8. **C:\Users\kramos\Desktop\Review8.PNG** | 9. **C:\Users\kramos\Desktop\Review9.PNG** |